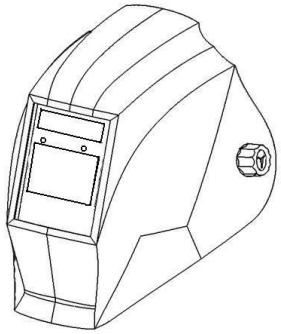
Auto-Darkening Welding Helmet

User's Manual

YC-06-C



Warning: For your own protection, please read these instructions carefully before using this auto-darkening welding helmet.

Auto-darkening welding helmets are designed to protect the eyes and faces from spark, spatter, and harmful radiation under normal welding conditions. Auto-darkening filter automatically changes from light state to dark state when the arc is struck, and returns to the light state when you stop welding.

Auto-darkening welding helmets comes ready to use. The only thing you need to do before welding is to adjust the position of headband.

BEFORE WELDING

Check the front cover lens and make sure that it is clean and no dirt covering the two sensors on the front of filter cartridge. Also check the front/inside cover lens and the back cover retaining frame to make sure that they are secure.

Check all operating parts before use for signs of wear or damage. Any scratched, cracked or pitted parts should be replaced immediately before using to avoid severe personal injury.

Adjust the headband so that the helmet is seated as low as possible on the head and close to your face. The angle of helmet is adjusted on the buckles, fastened at the different settings.

DARK SHADE NUMBER SELECTION

The fixed shade has been pre-set at DIN11.

PRODUCT FEATURES

This model is designed & equipped with a special turn over (up & down) headband mechanism. When the welder tilts the helmet upwards ,the headband mechanism lowers the helmet's centre of gravity. The design of the welding helmet greatly reduces the fatigue of welder's head & neck.

The moment the welding electrode arcs with the surface, the filter screen will automatically darken in about 0.0003 sec.

The delay time from dark to light is set about 0.3 s.

he helmet utilizes high performance solar cells as power supply with a built-in 3V lithium battery as a power back-up. Under normal conditional the battery has a life span will be in excess of 3 years.

The product is in full conformity with related DIN, ISO, EN safety standards and ANSI Z87.1-2010 standards.

The ultra high performance of UV/IR auto-darkening filters provide full protection for the user's eyes & face against UV/IR radiation during the entire welding process, even in the light state. The UV/IR protection level is up to Shade 15 (DIN) at all times..

WARNING

This Auto-Darkening Welding Helmet is **not suitable** for:

- Laser welding &
- Oxyacetylene welding.

Never place this helmet and auto-darkening filter on a hot surface.

Never open or tamper with the auto-darkening filter.

This Auto-darkening welding helmet will not protect against severe impact hazards, including grinding discs.

This helmet will not protect against explosive devices or corrosive liquids.

Don't make any modifications to either the filter or helmet, unless specified in this manual.

Don't use replacement parts other than those specified in this manual.

Unauthorized modification and replacement parts will void the warranty and expose the operator to the risk of personal injury.

Should this helmet not darken upon striking an arc, stop welding immediately and contact your supervisor or the dealer.

Don't immerse the filter in water.

Don't use any solvents on filter's screen or helmet components.

Use only at temperature:-5℃~+55℃

Storing temperature:-20℃~+70℃

Keep filter away from liquid and dirt.

Clean filter's surfaces regularly, do not use strong cleaning solutions. Always keep sensors and solar cells clean using a clean lint-free tissue/cloth.

Regularly replace the cracked/scratched/pitted front cover lens.

Severe personal injury could occur if the user fails to follow the aforementioned warnings, and/or falls to follow the operating instruction.

COMMON PROBLEMS AND REMIDIES

*Irregular Darkening Dimming

- Headband has been set unevenly and there is an uneven distance from the eyes to the filter's lens.
- Reset headband to reduce the difference to filter.

*Auto-darkening filter does not darken or flickers

- Front cover lens is soiled or damaged (change cover lens)
- Sensors are soiled (clean the sensors' surface)
- Welding current is too low.

*Slow Response

- Operating temperature is too low (do not use at temperatures below –5℃)
- When the battery power in the filter screen is inadequate, please stop using and change a new filter cartridge.

*Poor Vision

- Front/inside cover lens and/or filter lens are soiled change lens)
- There is insufficient ambient light.
- The protective film of the front/back cover lens is not peeled off.

*Welding Helmet Slips

- Headband is not adjusted properly (readjust headband)

Warning!

- Operator must stop using the auto-darkening welding helmet immediately if the above mentioned problems cannot be corrected. Contact the dealer.

LENS & HELMET MAINTENANCE

Replacing the front cover lens if it is damaged (cracked, scratched, soiled or pitted)

Step 1: Remove the back cover.

Step 2: Take out the auto-darkening cartridge.

Step 3: Take out the rubber seal with the front cover lens.

Step 4: Take out the front cover lens.

Step 5: Place the new front cover lens into the right position.

Step 6: Place the auto-darkening cartridge and the back cover into the position.

THCHNICAL SPECIFICATIONS

Viewing Area: 92×42mm

Size of Cartridge: 110×90×9mm

Light state: DIN 3

Darken state: DIN11

Switching Time: <0.0003s

UV/IR protection: Up to DIN15

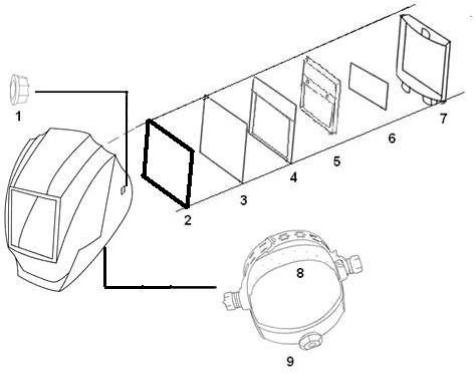
Operating Temperature: -5℃~+55℃

Storing Temperature: -20℃~+70℃

Helmet Material: High-impact resistant plastic/Polyamide Nylon.

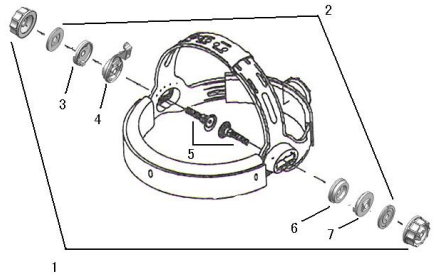
Total Weight: 420g

THE PARTS LIST OF THE HELMET



PARTS LIST & ASSEMBLY(Figure 1)
1. 2X Block Nut
2. Rubber Seal
3. Front Cover Lens
4. Conversion Frame
5. Auto-Darkening Filter Cartridge
6. Back Cover Lens
7. Cartridge Holder
8. Sweat Band
9. Headband

THE PARTS LIST OF THE HEADBAND



1. NUT **2. SPRING**

3. LOCATING PIECE-1 **4. ADJUSTABLE BUCKLE**

5. SCREW **6. EQUATION**

7. LOCATING PIECE-2

SHADE GUIDE TABLE

Welding Process	Arc Current (Amperes)														
	0.5	2.5	10	20	40	80	125	175	225	275	350	450			
	1	5	15	30	60	100	150	200	250	300	400	500			
SMAW				9	10	11		12			13		14		
MIG (heavy)						10	11		12			13		14	
MIG (light)						10	11		12		13		14		15
TIG, GRAW			9		10		11		12		13			14	
MAG/CO2						10	11		12		13		14		15
SAW								10	11	12	13		14		15
PAC							11		12			13			
PAW			8	9	10		11		12		13		14		15

Note:
- •SMAW - Shielded Metal Arc Welding
- •MIG(heavy) - MIG on heavy metals
- •MIG(light) - MIG on light alloys
- •TIG, GRAW - Gas Tungsten Arc Welding (GRAW)(TIG)
- •MAG/CO2 - Metal Active Gas Welding (CO2)
- •SAW - Shielded Semi - Automatic Arc Welding
- •PAC - Plasma Arc Cutting
- •PAW - Plasma Arc Welding

NOTE:

PLEASE USE THIS GUIDE TO ENSURE YOU ARE USING THE CORRECT WELDING HELMET FOR THE TYPE OF WELDING CARRIED OUT.